CLAIMS

Therefore, the following is claimed:

1. A system for controlling power in a communication system, comprising:

at least one counter configured to monitor data flow through a plurality of transceivers during a predefined first time period; and

a means for controlling coupled to the at least one counter and configured to compare the total data flow through the plurality of transceivers during the first time period with a predefined threshold, the means for controlling further configured to generate a control signal, such that when the total data flow monitored by the means for controlling during the first time period exceeds the threshold, the means for controlling generates the control signal such that data flow through each one of the plurality of transceivers is reduced for a portion of a predefined second time period so that the average of the data flow through the plurality of transceivers during the first time period and the second time period is less than the predefined threshold.

2. The system of claim 1, wherein the means for controlling further comprises:

a processor;

a memory coupled to the processor; and

a logic module residing in the memory and executed by the processor, the logic module configured to compare the threshold with the total data flow through the plurality of transceivers during the first time period, and further configured to allocate the difference between the threshold and data flow through the plurality of transceivers during the first time period among the plurality of transceivers so that the average of the data flow through the plurality of transmitters during the first time period and the second time period is less than the predefined threshold.

3. The system of claim 1, further comprising a transceiver processor coupled to the means for controlling, the transceiver and the counter, and further configured to receive the control signal from the processor unit and generate a transmitter control signal so that data flow through a transmitter residing in the transceiver is reduced during the second time period, and further configured to generate a receiver control signal so that data flow through a receiver residing in the transceiver is reduced during the second time period.

4. The system of claim 3, further comprising a memory coupled to the transceiver processor so that information corresponding to the data flow monitored by the counter during the first period is stored in the memory, and wherein the information is retrieved at the end of the first time period by the transceiver processor and transmitted to the means for controlling.

5. The system of claim 3, wherein the transceiver processor is further configured to power down the transmitter and the receiver to effect a slow down in a data flow through the transceiver.

6. The system of claim 1, further comprising a user interface coupled to the means for controlling and configured so that a user may specify the predefined time period and the predefined threshold.

7. A system for controlling power in a communication system, comprising:

a plurality of transceivers configured to transmit and receive communication signals;

at least one counter configured to monitor data flow through the plurality of transceivers during a predefined first time period; and

a means for controlling coupled to the at least one counter and configured to compare the total data flow through the plurality of transceivers during the first time period with a predefined threshold, the processor unit further configured to generate a control signal,

such that when the total data flow monitored by the means for controlling during the first time period exceeds the threshold, the means for controlling generates the control signal such that data flow through each one of the plurality of transceivers is reduced for a portion of a predefined second time period so that the average of the data flow through the plurality of transceivers during the first time period and the second time period is less than the predefined threshold.

8. The system of claim 7, wherein the transceiver further comprises:

a transmitter configured to transmit a communication signal;

a receiver configured to receive a communication signal; and

a transceiver processor coupled to the means for controlling, the transmitter, the receiver and the counter, and further configured to receive the control signal from the means for controlling and generate a transmitter control signal so that data flow through the transmitter residing in the transceiver is reduced during the second time period, and further configured to generate a receiver control signal so that data flow through the receiver residing in the transceiver is reduced during the second time period.

9. The system of claim 7, further comprising a user interface coupled to the means for controlling and configured so that a user may specify the predefined time period and the predefined threshold.

10. A method for controlling data flow in a communication system, the method comprising the steps of:

monitoring data flow through a plurality of transceivers for a predefined first time period;

determining the total data flow through the plurality of transceivers during the first time period;

comparing the total data flow to a predefined threshold; and

reducing data flow through at least one of the plurality of transceivers for a predefined second time period so that the average of the data flow through the plurality of transmitters during the first time period and the second time period is less than the predefined threshold.

11. The method of claim 10, further comprising the steps of:

determining a difference between the total data flow through the plurality of transceivers during the first time period and the threshold; and

allocating the difference among the plurality of transceivers according to a predefined algorithm.

12. The method of claim 10, further comprising the step of associating the predefined threshold with a specified total amount of heat to be dissipated by the plurality of transceivers during the first time period so that when the total data flow through the plurality of transceivers equals the predefined threshold the total amount of heat dissipated substantially equals the specified total amount of heat.

13. The method of claim 10, further comprising the step of specifying the first period and the second period.

14. The method of claim 10, further comprising the step of specifying the threshold.

15. The method of claim 10, further comprising the step of turning off the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of transceivers is reduced during the second time period.

16. The method of claim 15, further comprising the step of turning off a plurality of transmitters residing in the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of transmitters is reduced during the second time period.

17. The method of claim 15, further comprising the step of turning off a plurality of receivers residing in the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of receivers is reduced during the second time period.

18. The method of claim 17, further comprising the step of adding information to the communication signal transmitted during the first time period so that a remote transceiver transmitting to the receiver during the second time period transmits data at times which correspond to times that the receiver is turned on during the second time period.

19. The method of claim 10, further comprising the step of determining data flow rates through the plurality of transceivers for a third time period such that that total data flow through the transceivers substantially equals the predefined threshold.

20. The method of claim 19, further comprising the steps of:

specifying a predefined holdback corresponding to a specified data flow to be allocated to an inactive transceiver in the third time period; and

determining data flow rates through the plurality of transceivers for the third time period such that that total data flow through the transceivers substantially equals the predefined threshold less the holdback.

21. A system for controlling data flow in a communication system, comprising:

means for monitoring data flow through a plurality of transceivers for a predefined first time period;

means for determining the total data flow through the plurality of transceivers during the first time period;

means for comparing the total data flow to a predefined threshold; and

means for reducing data flow through at least one of the plurality of transceivers for a predefined second time period so that the average of the data flow through the plurality of transmitters during the first time period and the second time period is less than the predefined threshold.

22. The system of claim 21, further comprising:

means for determining a difference between the total data flow through the plurality of transceivers during the first time period and the threshold; and

means for allocating the difference among the plurality of predefined transceivers according to a predefined algorithm.

23. The system of claim 21, further comprising means for specifying the first period and the second period.

24. The system of claim 21, further comprising means for specifying the threshold.

25. The system of claim 21, further comprising means for turning off selected ones of the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of transceivers is reduced during the second time period.

26. The system of claim 25, further comprising means for turning off a plurality of transmitters residing in the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of transmitters is reduced during the second time period.

27. The system of claim 25, further comprising means for turning off a plurality of receivers residing in the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of receivers is reduced during the second time period.

28. The method of claim 27, further comprising means for adding information to the communication signal transmitted during the first time period so that a remote transceiver transmitting to the receiver during the second time period transmits data at times which correspond to times that the receiver is turned on during the second time period.

29. A computer readable medium having a program for reducing noise in a communication system, the program comprising logic configured to perform the steps of:

receiving information corresponding to the total data flow through a plurality of transceivers during a predefined first time period;

comparing the total data flow to a predefined threshold; and

determining a control signal such that data flow through at least one of the plurality of transceivers for a predefined second time period is reduced so that the average of the data flow through the plurality of transmitters during the first time period and the second time period is less than the predefined threshold.

30. The computer readable medium of claim 29, further comprising logic configured to perform the steps of:

determining a difference between the total data flow through the plurality of transceivers during the first time period and the threshold; and

allocating the difference among the plurality of predefined transceivers according to a predefined algorithm.

31. The computer readable medium of claim 29, further comprising logic configured to perform the step of determining a control signal for turning off the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of transceivers is reduced during the second time period.

32. The computer readable medium of claim 29, further comprising logic configured to perform the step of determining a control signal for turning off a plurality of transmitters residing in the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of transmitters is reduced during the second time period.

33. The computer readable medium of claim 29, further comprising logic configured to perform the step of determining a control signal for turning off a plurality of receivers residing in the plurality of transceivers for a specified portion of the second time period such that data flow through the plurality of receivers is reduced during the second time period.

34. The computer readable medium of claim 29, further comprising logic configured to perform the step of determining information to be added to the communication signal transmitted during the first time period so that a remote transceiver transmitting to the receiver during the second time period transmits data at times which correspond to times that the receiver is turned on during the second time period.